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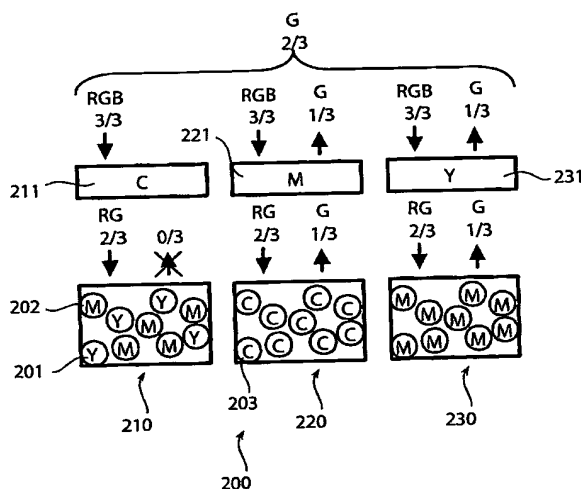
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[Continued on next page]

(54) Title: A FAST FULL COLOR ELECTROPHORETIC DISPLAY WITH IMPROVED DRIVING



(57) Abstract: The present invention provides a novel design for color electrophoretic displays. In the display, each pixel (200) comprises at least two sub-pixels (210, 220, 230), and each sub pixel is fitted with a color filter (211, 221, 231) and contains an electrophoretic media comprising two particle types (201, 202, 203). The color filters (211, 221, 231) in the sub-pixels of each pixel have essentially non-overlapping absorption bands, and together cover essentially all of the wavelengths over which the display is operative. Furthermore, the absorption bands of the particles in each sub-pixel (210, 220, 230) each cover a portion of the wavelengths that is not covered by the filter (211, 221, 231) in the respective sub-pixel. The wavelength bands typically correspond to different colors. Thereby each wavelength band, or color, can be emitted by more than one sub-pixel in each pixel, resulting in increased brightness. According to one particular embodiment, each pixel comprises three sub-pixels having a cyan, magenta, and yellow absorbing filter, respectively.



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